# A NEW GENUS AND SPECIES OF PENTATOMIDAE (HEMIPTERA: HETEROPTERA) FROM NORTHERN AUSTRALIA

F.J.D. McDONALD

*Department of Crop Sciences, University of Sydney, NSW 2006*

## Abstract

*Linea griggae* gen. *et* sp. n. from Western Australia, Queensland and the Northern Territory is described and figured. The genus is related to *Cephaloplatus* White. No host plant records are known.

## Introduction

A distinctive new genus of Pentatomidae is recorded from the Northern Territory, Queensland and Western Australia. Adults are oval, greyish brown with distinctive cream and dark brown stripes on the dorsal surface. The lateral margins in front of the eyes are produced into a distinct spine also found in *Cephaloplatus* White. There are no records of host plants. Specimens appear to be attracted to light and have even been collected 9.65 km out to sea.

## Materials and methods

All measurements are in millimeters. The body width is taken as the width across the base of the pronotum and the length is from the apex of the head to the tips of paratergites 7. Terminology used follows McDonald (1966) and Gross (1975). Abbreviations used are: ANIC, Australian National Insect Collection, CSIRO, Canberra; MM, Macleay Museum, University of Sydney; WAM, Western Australian Museum, Perth.

## *Linea* gen. n.

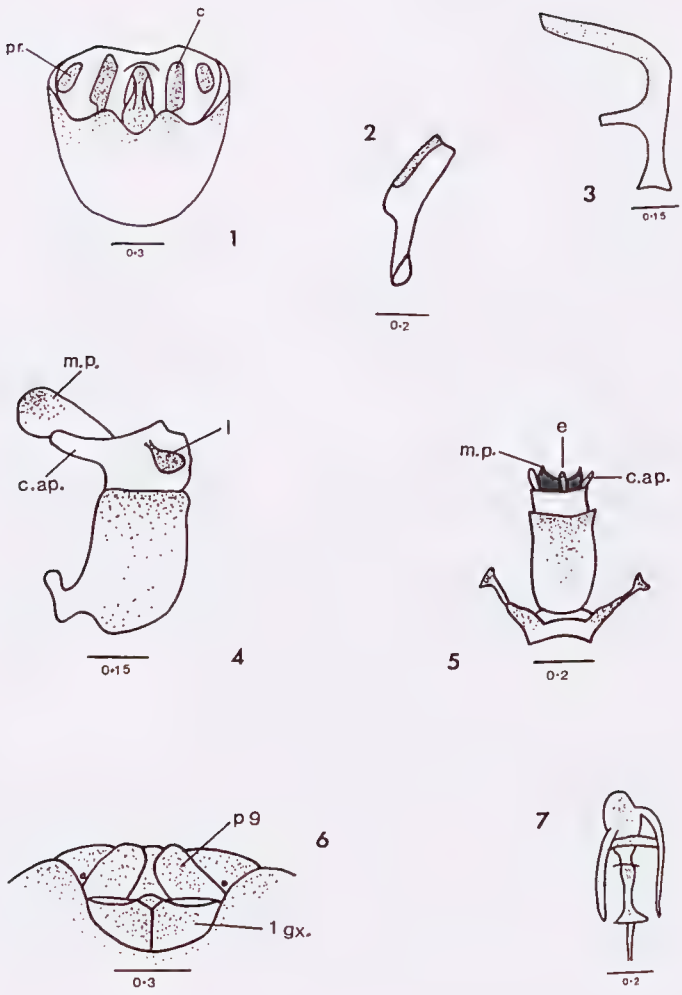
(Figs 1-8)

Type species *Linea griggae* sp. n.

*Description*. Head. Two small projections found, one on either side of eyes, jugae flattened and broad surpassing tylus. Antennae. All segments with a number of short hairs; one and two short, three longest, four and five equal in length. Thorax. Prothorax with lateral margins impressed. Legs. Femora, tibiae and tarsi covered with short hairs. Mesosternum. Stink gland opening small ear-like; evaporative area covering most of sternum.

*Male genitalia* (Figs 1-5). Dorsal margin broadly arched. Ventral margin bilobed with a central emargination deeply impressed behind margin. Inner lateral margins with two peg-like processes one on each side. Parameres large F-shaped. Aedeagus very small, when expanded one pair of membranous conjunctival appendages, lappet processes present one on each side. Median penial lobes very small plate-like enclosing a very short ejaculatory duct.

*Comments*. This genus is a member of the *Cephaloplatus* group (Gross 1976) by virtue of the fact that the jugae surpass the anteclypeus and are flattened.




**Figs 1-7.** *Linea griggae* (1) pygophore; (2) right clasper, lateral; (3) right paramere, inner view; (4) aedeagus, lateral; (5) aedeagus, dorsal; (6) female genital plates; (7) spermatheca. Abbreviations: c, clasper; c.ap., conjunctival appendage; e, ejaculatory duct; 1 gx., first gonocoxa; l, lappet process; m.p., median penial lobe; p9, paratergite 9; pr., process.

*Linea* can readily be distinguished from *Cephalaplatus*, which has the anterior margins produced forward as an angulate process to the anterior margins of the eyes, since in *Linea* the margin is not produced. The male genitalia are quite distinct from those of *Cephaloplatus reticulatus* Bergroth (Gross 1975). The parameres are T-shaped in C. *reticulatus* whereas in *Linea* they are F-shaped. The aedeagus in *Linea* is also distinct, having very small conjunctival appendages, whereas in C. *reticulatus* they are quite large and inflatable.

**Fig. 8.** *Linea griggae*, adult female.

### *Linea griggae* sp. n.

(Figs 1-8)

*Types*. *Holotype* ♂, WESTERN AUSTRALIA: North West Cape, 22.vii.1964, L.E. Koch (WAM). *Paratypes*: 1 ♂, 1 ♀, Cape Range, iv.1970, P.N. Forte; 4 ♂♂, 14 ♀♀, North West Cape, 21.vii.1964, L.E. Koch (WAM).

*Other material examined*. WESTERN AUSTRALIA: 1 ♂, 1 ♀, Port Hedland, 9.65 km out to sea, R. Easton, (WAM); 1 ♂, 7 ♀♀, Ashburton River, 30.viii.1964, P.B. Carne; 1 ♀, Wyndham, 12.ii.1953, G. Lukins, (ANIC). QUEENSLAND: 1 ♀, Limestone Creek, 22°35'S, 139°43'E, 42 km NNW of Boulia, 11.v.1973, Upton and McInnes (ANIC). NORTHERN TERRITORY: 1 ♂, 1 ♀, 4.8 km S. of Renner Springs, 8.iv.1966, N. McFarland; (SAM) 1 ♂, 7 ♀♀, Tennant Creek, 23.i.1976, J. Grigg (MM).

*Description* (Fig. 8). Head. Buff coloured with dark brown punctations. Thorax. Prothorax - dorsal surface buff coloured, lateral margins impressed, cream; broad dark brown bands running adjacent to lateral margins, dark brown spot centrally. Mesoscutellum with 3 cream stripes one on each lateral margin and one centrally, separated by dark brown bands. Hemelytra buff coloured with a narrow cream band running the length of medial fracture with a dark brown band running along inner side, basally broad tapering towards base of each hemelytron. Membrane grey-brown. Pro-, meso- and metasterna amber with dark brown punctations and brown bands around coxal bases. Legs buff coloured. Abdomen. Sterna with a broad buff band with brown punctations along lateral margins, centrally dark brown with pale patches in middle of stema 4, 5 and 6. Spiracles outlined in black. Female genitalia (Figs 6-7). First gonocoxae, broad plate-like with a narrow impression along anterior margins. Second gonocoxae with a small central knob at junction with first gonocoxae. Paratergites 9 broad spatulate. Spematheca very similar to *Minchamia hubbardi* Gross (Gross 1975); spermathecal bulb with 2 long processes. Male genitalia (Figs 1-5) as for generic description.

*Measurements*. Male (n = 10): length 6.9 mm (range 7.2-6.5); width 3.6 mm (range 3.7-3.4). Female (n = 34): length 7.8 mm (range 8.2-7.0); width 4.0 mm (range 4.1-3.4).

*Etymology*. *Linea* from latin, a line, referring to the stripes on the scutellum and *griggae* after Jan Grigg, collector of several specimens.

**Acknowledgements**

I thank the following curators and institutions for the loan of specimens: T. Weir, ANIC; Dr G.F. Gross, SAM; Dr T.F. Houston, WAM.

**References**

GROSS, G.F. 1975. *Plant feeding and other bugs (Hemiptera) of South Australia. Heteroptera, Part 1*. A.B. James, Adelaide; 250pp.

McDONALD, F.J.D. 1966. The genitalia of North American Pentatomoidea (Hemiptera: Heteroptera). *Questiones Entomologicae* **2**: 7-50.